

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

CLAIM 1 (Canceled):

CLAIM 2 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein first and second nodes are electronic devices.

CLAIM 3 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein first and second switching devices are electronic devices selected from the group consisting of repeaters, hubs, routers, bridges, and switches.

CLAIM 4 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein the star segment further comprises a third node connected to a third port located on the first switching device.

CLAIMS 5-8 (Canceled):

CLAIM 9 (Previously Presented):

2 The computer operable method as recited in claim 23, providing first and second nodes are electronic devices.

CLAIM 10 (Previously Presented):

2 The computer operable method as recited in claim 23, providing first and second switching devices are electronic devices selected from the group consisting of repeaters, hubs, routers, bridges, and switches.

CLAIM 11 (Previously Presented):

2 The computer operable method as recited in claim 23, providing the star segment further comprises a third node connected to a third port located on the first switching device.

CLAIMS 12-15 (Canceled):

CLAIMS 16-18 (Canceled):

CLAIM 19 (Currently Amended):

A program storage medium readable by a computer, ~~tangibly~~

2 embodying a software computer program of instructions executable by
4 the computer to perform method steps for automatically specifying a
topological map, wherein the topological map describes the
6 connectivity of nodes on a computer network, wherein the network
comprises a first switching device having a first port, said steps the
instructions comprising:
8

10 if connection of a first node to the first port is detected: detecting
connection of a first node to the first port;

12 if connection of a second node to the first port has been was
previously detected; detected:
14

16 specifying that the topology topological map of the network
18 comprises a bus segment attached to the first port, wherein the
bus segment comprises the first port, the first node, the second
node, and that part of the network interconnecting the first port,
the first node, and the second node; node.
20

22 otherwise, if the first node is a second port located on a second
switching device; device:
24

26 specifying that the topology topological map of the network
28 comprises a serial segment attached to the first port, wherein the
serial segment comprises the first port, the second port, and
that part of the network interconnecting the first port and the second
port; port, and

30 otherwise; otherwise:

32 specifying that the topology topological map of the network
34 comprises a star segment attached to the first port, wherein the
star segment comprises the first port, the first node, and that
36 part of the network interconnecting the first port and the first
node; node; and

38 using the topological map to control the flow of messages on the
network.
40

CLAIM 20 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein the
method step specifying that the topology of the network comprises the
bus segment attached to the first port comprises:
4

6 if the bus segment is absent, specifying the bus segment;

steps of: comprising:

if connection of a first node to the first port is detected: detecting
connection of a first node to the first port;

if connection of a second node to the first port has been was
previously detected; detected:

specifying that the topology topological map of the network
comprises a bus segment attached to the first port, wherein the
bus segment comprises the first port, the first node, the second
node, and that part of the network interconnecting the first port,
the first node, and the second node; node.

otherwise, if the first node is a second port located on a second
switching device; device:

specifying that the topology topological map of the network
comprises a serial segment attached to the first port, wherein
the serial segment comprises the first port, the second port, and
that part of the network interconnecting the first port and the
second port; port, and

otherwise; otherwise:

specifying that the topology topological map of the network
comprises a star segment attached to the first port, wherein the
star segment comprises the first port, the first node, and that
part of the network interconnecting the first port and the first
node; node; and

using the topological map to control the flow of messages on the
network.

CLAIM 24 (Previously Presented):

The computer operable method as recited in claim 23, the method step
specifying that the topology of the computer network comprises the
bus segment attached to the first port comprising:

if the bus segment is absent, specifying the bus segment;

if the serial segment was previously specified:

transferring the second node and the first port from the
previously specified serial segment to the bus segment,

deleting the previously specified serial segment, and

- adding the first node to the bus segment;
- otherwise, if the star segment was previously specified:
 - transferring the second node from the previously specified star segment to the bus segment,
 - deleting the previously specified star segment, and
 - adding the first node to the bus segment; and
- otherwise, adding the first node to the bus segment.

CLAIM 25 (Previously Presented):

The computer operable method as recited in claim 23, wherein the method step specifying that the topology of the network comprises the serial segment attached to the fort port comprises:

specifying the serial segment;

adding the first node to the serial segment; and

adding the first port to the serial segment.

CLAIM 26 (Previously Presented):

The computer operable method as recited in claim 23, wherein the method step specifying that the topology of the network comprises the star segment attached to the first port comprises:

specifying the star segment;

adding the first node to the star segment; and

adding the first port to the star segment.

CLAIM 27 (Cancelled):